

Serial No. 10/722,563
Docket No. PTGF-03095

7

REMARKS

Entry of this Amendment is proper under 37 CFR §1.116, since no new claims or issues are presented and the only claim amendments are believed to be those putting all claims into condition for immediate allowance..

Claims 1-5, 13-16, and 18-26 are all the claims presently pending in the application. Claims 6-12 and 17 are canceled.

It is noted that Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges that claims 12, 13, and 17 would be allowable if rewritten in independent form. However, Applicant respectfully submits that all of the claims are allowable, once the concepts of the independent claims are given patentable significance.

Claims 6-8 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Claims 1-11, 14-16, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellens, et al. (U.S. Patent No. 6,670,748). Claims 19, 21, 23, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellens, et al., in view of Lebens, et al. (U.S. Patent No. 6,095,661). Claims 20, 22, 24, and 26 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellens, et al., in view of Lebens, et al.

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention, as exemplarily defined by claim 1, is directed to a light emitting apparatus including a light emitting element with an emission wavelength in a range of 360 to 550 nm and a rare-earth element doped oxide nitride phosphor.

A part of light radiated from the light emitting element is wavelength-converted by the phosphor. The phosphor comprises a sialon system phosphor powder comprising α -sialon of 40 weight% or more and 90 weight% or less, the α -sialon being structured such that a Ca site of Ca- α -sialon represented by: $(Ca_x, M_y)(Si, Al)_{12}(O, N)_{16}$ is partially replaced by metal (M), β -sialon of 40 weight% or less, and unreacted silicon nitride of and 30 weight% or less, where M comprises metal that is one or more selected from Ce, Pr, Eu, Tb, Yb and Er and

Serial No. 10/722,563
Docket No. PTGF-03095

8

$0.05 < (x + y) < 0.3$, $0.02 < x < 0.27$ and $0.03 < y < 0.3$.

As discussed beginning at line 19 of page 1 and more particularly beginning at line 15 on page 4, the present inventors have recognized that conventional methods of mixing LED lights to obtain colors have problems with specific colors such as red or white.

The claimed invention, on the other hand, as explained at lines 1-6 of page 5, provides a combination of elements that improve these problems specifically for red and white.

II. THE 35 USC §112, SECOND PARAGRAPH REJECTION

Claims 6-8 stand rejected under 35 U.S.C. §112, second paragraph. Cancellation of these claims renders this rejection moot.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTIONS

The Examiner alleges that Ellens teaches the present invention defined by claims 1-11 and 14-16 and, when modified by Lebens, renders obvious claims 19-26. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Ellens.

Claims 1 and 19 each are amended to include most of the limitations of claim 12, except the lower limit of β -sialon, i.e., 5 weight % or more. With respect to claim 12, the Examiner states that this claim is allowable if rewritten in independent form (paragraph 7 on page 12 of the Office Action).

Furthermore, the Examiner states that "neither double patenting nor a rejection under 102(e) appears possible because the limitation to 90% in weight or less for the alpha-sialon as claimed is not found herein (paragraph 7 of pages 12-13 of the Office Action)."

Therefore, Applicants believe that, even when the lower limits of β -sialon and unreacted silicon nitride are deleted, claim 1 is still patentable, since it has the limitation to 90% in weight or less for the α -sialon.

Moreover, claim 19 is also patentable, since it includes the allowable subject matter, i.e., the limitation of claim 12.

Serial No. 10/722,563
Docket No. PTGF-03095

9

Accordingly, claims 1 and its dependent claims 2-5 and 13 should be allowed, and claim 19 and its dependent claims 21, 23, and 25 should be allowed.

Claims 14 and 20 are amended to include all of the limitations of claim 17. The Examiner states that claim 17 is allowable if rewritten in independent form (paragraph 8 on page 13 of the Office Action). Therefore, Applicants believe that claim 14 is allowable, since it includes the allowable subject matter (i.e., the limitations of claim 17). Accordingly, claim 14 and its dependent claims 15, 16, and 18 should be allowed, along with claim 20 and its dependent claims 22, 24, and 26.

IV. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-5, 13-16, and 18-26, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance.

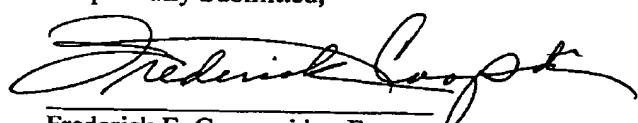
The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 10/26/05



Frederick E. Cooperrider, Esq.
Registration No. 36,769

McGinn Intellectual Property Law Group, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254